CITY OF VERNON COMMUNITY SERVICES DEPARTMENT
STAFF REPORT
ON GREENSTAR BIOFUELS, LLC. DBA: GEOGREEN BIOFUELS
CONDITIONAL USE PERMIT
TO OPERATE A RECYCLED MATERIALS PROCESSING FACILITY
AT 6017 MALBURG WAY
December 7, 2006

GreenStar Biofuels, LLC. dba: GeoGreen Biofuels ("GeoGreen") has submitted an application for a conditional use permit to operate recycled materials processing facility located at 6017 Malburg Way, in the City of Vernon. GeoGreen is a recycling, alternative fuel company which produces a fuel known as biodiesel. The recycling operation will utilize a series of equipment to convert waste restaurant vegetable oil into a high-grade, natural, and sustainable diesel fuel capable of powering virtually any diesel engine and will operate 24 hours a day, 7 days per week.

1. **GENERAL PLAN** The proposed use is consistent with the Zoning Ordinance and General Plan. The site is located in the M-Zone, General Industrial. GeoGreen is considered a recycled materials processing facility. A recycled materials processing facility is defined in Section 26.2.14 of the Comprehensive Zoning Ordinance as a facility that processes recycled materials in order to convert and redistribute them as raw materials for recycled products or in order to convert them and manufacture a product made wholly or partly from recycled materials. A recycled material processing facility does not include a use ancillary to an industrial use. A recycled materials processing facility is an allowed use in the M-Zone with approval of a conditional use permit.

2. **SITE** The proposed project will be established in a portion of a 50,000 square foot building (approximately 9,350 sq. ft.) located on an 86,000 square foot lot. The applicant has not proposed any changes to the size, shape of the existing site and is adequate for the proposed operation. The topography of the site will slightly be altered to allow for a sump area where the unloading operations will occur.

3. **ADVERSE EFFECT** The proposed use is surrounded by properties with industrial, commercial, office and warehousing uses that are compatible with the proposed use. In accordance with the California Building Code occupancy separation walls will be constructed. The biodiesel processing facility will include a 6,000 gallon methanol storage tank located exterior to the building. The storage tank and associated piping/equipment has been designed to meet all applicable codes, including the *2001 California Fire Code*, Title 24 of the California Building Standards Code, Uniform Building Code, City of Vernon regulations on storage of flammable liquids, and the *2002 National Electrical Code*. The tank will be constructed of low-carbon steel and will have an integral double wall containment system for maximum safety. In addition, the tank will be positioned to comply with applicable codes regarding minimum distances to electrical equipment, vehicle loading and unloading operations, parking area traffic flow, property lines, buildings, and exits. The tank will be secured in a manner that meets Seismic Risk, Zone 4 requirements. All electrical equipment in proximity to the tank will meet Class 1, Division 1 specifications of the *2002 National Electrical Code.* Although not required for tanks with integral secondary containment, GeoGreen will include a secondary containment area in conjunction with the tanker truck loading and unloading

area. Leak monitors will be installed between the inner and outer walls of the methanol storage tank. Loading and unloading operations will be conducted within a fenced area complying with specifications given in the *2001 California Fire Code.* Level sensors will be installed to prevent accidental overfilling and overflow of the tank. Guard posts (bollards) will be installed around exposed piping, valves, and liquid transport equipment to prevent possible vehicle damage. The tank will be operated at atmospheric pressure and will be equipped with adequate venting to prevent an overpressure condition from occurring, in compliance with all regulations and codes. Construction of the tanks and ancillary equipment will meet all applicable national standards, including ANSI and UL.

Therefore, no adverse impacts from traffic, parking, noise, odor, dust, smoke, light or glare, or risk of fire, infection or explosion are expected to occur to the adjacent or abutting properties. An initial study has been conducted for the project in compliance with the California Environmental Quality Act (CEQA). No potentially significant impacts are expected to result from the project. The Director of Community Services & Water has recommended that a Notice of Intent be filed, and a Negative Declaration be adopted in compliance with the California Environmental Quality Act ("CEQA"), which identifies potentially significant impacts on the environment from the project.

4. **ACCESS** The proposed site has one driveway on Malburg Way located on the east side of the building, which provides ingress and egress from Malburg Way. The streets and highways surrounding the proposed use are adequate in width and are improved as necessary to carry the traffic expected by this proposed use. The subject site is served by Malburg Way, a local roadway with a right-of-way of 60 feet.

5. **VEHICLE MOVEMENTS** The number of truck trips for the purpose of ingress/egress combined will consist of 6 to 12 entering the premises during a typical 24-hour period. The number of personal vehicle trips will consist of 2 to 6 employees spread over 3 shifts. Vehicles traveling to the site will generally exit the I-710 and travel westbound on Bandini Boulevard to Downey Road, then southbound on Downey Road to Malburg Way to the site. Vehicles exiting the site will utilize the same streets in the opposite direction. The normal hours of operation will be 24 hours 7 days per week. Based on the number of employees (only 2-6 employees spread-out over 3 shifts) the vehicle trips and traffic congestion generated by proposed use will not be enough to cause any significant impact.

6. **OPERATIONS** GeoGreen is a recycling, alternative fuel company which produces a fuel known as biodiesel. The proposed use will utilize specialized equipment to convert restaurant vegetable oil into a high-grade, natural, and sustainable diesel fuel capable of powering virtually any diesel engine.

GeoGreen's processing plant has been designed to eliminate direct handling of chemicals and product stream. All raw materials are delivered in closed containers or trucks and the materials are loaded from the carrier to the appropriate storage tank using mechanical hookups with no need for human handling of the raw material. The processor is a closed system with no manual handling of the product stream during the process. There are no vents in the system so all fumes are contained resulting in no emissions. GeoGreen uses double-walled carbon steel tanks pressure rated at 300-400 psi. The process uses only 50 psi, well below the system threshold. All pumps and motors are

TEFC rated. Exotic materials of construction are not required. There is little heat exchange in the reaction and there are minimal side reactions and reaction time. There is no water used in the process, so there is no requirement for water supply or waste water removal.

Raw materials include recycled vegetable oils or virgin oils, a liquid methylate mix and methanol. All are containerized with no or little contact with people. Methanol is the alcohol GeoGreen uses as the catalyst in their process. It is a widely used product and has well defined procedures and guidelines for handling. GeoGreen recovers any unused methanol from the product mix, and it is automatically re-introduced into the process with no human contact.

In addition to biodiesel, Glycerine is a by-product of the process. Glycerine has many uses and can be sold as a compost enhancer, regenerative plant fuel or to renderers who use it in various products. It is non-toxic. GeoGreen's intentions are to run the facility 24/7 in order to maximize capacity. There will be two to six people on site at any given time with additional staff in collection trucks. The plant capacity will be 250,000 gallons per month output (8,300 gallons per day, or 3.0 million gallons per year), and plans to operate at 80% of that (200,000 gallons/month). In order to produce 8,000 gallons of biodiesel per day GeoGreen will utilize four trucks running three shifts to make pick ups of GeoGreen logo-painted drums at restaurant sites. Running a 2nd and 3rd shift will be beneficial considering decreased traffic in off-peak hours. Each truck driver will complete seven pick-ups per shift and one delivery to the plant. The trucks will be stored at offsite locations.

GeoGreen's goal is to provide an environmentally friendly fuel to small companies, communities, agricultural crops and entrepreneurs while creating jobs and reducing the United Stated dependence on foreign sources of oil.

As previously mentioned, the proposed operation will operate 24 hours a day, 7 days per week. The number of employees on site will consist of 2 to 6 employees spread over 3 shifts (2-3 employees per shift), and the hours of operation will be 24 hours 7 days per week.

7. **STATE OR FEDERAL CONDITIONS** All Federal, State, and local regulatory permits shall be obtained as required for the operation.

8. **CONDITIONS** It is recommended that the following conditions be set on the permit to adequately protect the public health, safety and general welfare:

a. The facility shall be operated in accordance with, and made to conform with all current codes, rules, and regulations including any required fees as adopted by the City of Vernon not otherwise addressed by this grant of a conditional use permit.

b. All required federal, state, local and regulatory agency permits shall be obtained prior to operation. Prior to occupancy a business license and occupancy permit shall be obtained.

c. Any hazardous substances used, handled and/or stored shall have prior approval from the Vernon Fire and Health Departments. A Health Permit shall be obtained if there are reportable quantities of hazardous materials on the site.

d. Servicing of vehicles, including but not limited to, washing, steam cleaning and repairing, shall not be permitted on the premises. No inoperative vehicles shall be stored on-site. All vehicles operated at the facility shall be tuned and maintained in accordance with applicable emission standards.

e. The facility shall be operated in a manner, which will not impede traffic on Malburg Way. All vehicles shall enter and exit the site in a front forward manner. No maneuvering or vehicle parking associated with the facility shall take place on the public street.

f. GeoGreen shall submit a Notice of Intent to the California Regional Water Quality Control Board (CRWQCB) to address National Pollutant Discharge Elimination System (NPDES) requirements regarding storm water runoff. All storm water shall drain off-site and not flow to adjacent properties. A copy of the Storm Water Pollution Prevention Plan (SWPPP) as required under the NPDES permit shall be submitted to the Environmental Health Department for review and approval. In areas where outdoor operations occur, excluding automobile parking, the area shall either be covered with a canopy or the area shall be drained to a sump. An alternative Standard Urban Stormwater Management Plan approved by the City shall be developed and implemented to treat and dispose of any stormwater coming in contact with the outdoor operational area.

g. Outdoor operations, excluding automobile parking, shall be within a fenced area to exclude the public from entering the area.

h. GeoGreen shall obtain all required permits from South Coast Air Quality Management District (SCAQMD) prior to operation. All vehicles and heavy equipment operated at the facility shall be tuned and maintained in accordance with applicable emission standards.

i. Adequate written plans and materials must be available for cleaning up of leaks or spills of oils or other substances associated with GeoGreen operation. GeoGreen shall file and maintain a Spill Prevention Control and Countermeasures Plan (SPCCP) required for the above ground storage tanks.

j. GeoGreen shall implement a personnel safety-training program to include personal safety, handling hazardous waste, and fire protection procedures.

k. The project site shall be constructed and maintained substantially in compliance with the site plans submitted as part of this conditional use permit application.

l. All on-site construction or improvements shall be in compliance with the most current Building Codes (Building, Fire, Mechanical, Plumbing and Electrical) and current Health and Safety Codes and Regulations. GeoGreen shall obtain all necessary building, fire, mechanical, plumbing, and electrical permits from the City of Vernon Community Services Department in addition to any required Vernon Environmental Health Department clearance prior to commencement of construction.

m. Broken or cracked sidewalk, curb, gutter or driveway in Malburg Way adjacent to the site shall be repaired as directed by the Director of Community Services and Water.

n. All parking and loading facilities shall be paved with a hard durable surface material and shall be adequately drained, and kept free of dust, mud, trash and weeds. Where parking or maneuvering areas adjoin the public street a barrier wall or landscaping shall be installed and maintained to meet City standards. Adequate on-site parking shall be maintained so that no on street parking or staging will occur.

o. The facility shall be operated in such a manner that odors, noise and vibration shall not be a nuisance to neighborhood properties. At no time shall noise exceed 65dba or vibration exceeds four hundredths of an inch per second particle velocity when measured at the facilities lease line. The facility shall comply with all City of Vernon and CalOSHA noise requirements at all times. If the City in its sole discretion determines that an odor nuisance is caused by the proposed operation additional odor controls shall be installed to the satisfaction of the City or the operation shall be terminated.

p. The building and/or equipment shall be maintained so as to prevent the entrance of rodents and harborage of rodents.

q. Any expansion beyond a production of 250,000 gallons per month of biodiesel fuel or any change in use shall require a new conditional use permit.